

Vermicella annulata (Gray)

1841 *Calamaria annulata* Gray, in Grey's Journ. Exped. W. Austral., 2: 443. Type locality, "Australia."

1915 *Furina multifasciata* Longman, Mem. Queensl. Mus., 3: 30.

Longman's *multifasciata* is reduced to a synonym of *annulata*, despite the fact that the ventral scale count (284) is well above other records. This could be freakish or even a count error caused by a slipping epidermis prior to sloughing, where a large number of additional ventrals can be clearly seen and not readily detected as such, particularly on small snakes. My specimens from the type locality (Darwin) and south to Mataranka showed that the inter-nasal shield may or may not be present.

NAROPHIS gen. nov.

Maxillary more anterior than palatine with a pair of strongly recurved venom fangs only; frontal bones posteriorly rounded, broader than long; prominent postfrontal not in contact with frontal or prefrontal which is broadly sutured to the lateral margin of the frontal more or less excluding it from the orbital periphery.

Snout elongate with a large posteriorly acute rostral, concave on the lower side with an angulate anterior edge; internasals obliquely disposed; canthus rostralis absent; pupil round; nasal scale in contact with preocular; midbody scale rows 15; anal and sub-caudals divided.

Narophis bimaculata (Duméril & Bibron)

1854 *Furina bimaculata* Dumeril & Bibron, Erpet. Gen., 7: 1240. Type locality, "Tasmania" [undoubtedly Western Australia].

The status of *Vermicella calonota* has already been dealt with (Worrell, 1960: 133).

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SPHAEROBOLUS STELLATUS,
A NEW FUNGUS FOR WESTERN AUSTRALIA

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The existence of *Sphaerobolus stellatus* Tode ex Pers. was first brought to the notice of the author when Mr. R. C. B. Elson, Applecross, reported that since April 5, 1961 he observed little 'black spots' which to all intents and purposes were being shot up from his lawn. These were causing concern by the way they spotted

the washing on the line, as well as the footpaths, house walls, etc. This report does not preclude the possibility that this phenomenon has been observed previously. It only means that this is the first instance in which the cause of the 'black spots' has been traced and determined. Specimens of the fungus were collected by the author on May 2, 1961, in and amongst lawn clippings of a healthy buffalo grass (*Stenotaphrum secundatum* (Walt.) Kuntze) lawn.

S. stellatus has one peridiolum (the 'black spot' referred to earlier) per peridium which is forcibly discharged by a catapulting mechanism (Fig. 1, A-E). In this regard it differs from the bird's nest fungi, to which it is closely allied; the bird's nest fungi possess several peridiola per peridium which are dislodged by the action of rain-splash.

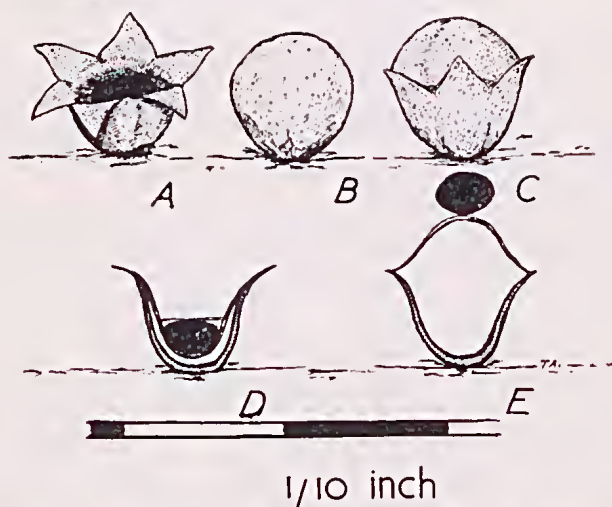


Fig. 1.—*Sphacrobolus stellatus* Tode ex Pers.

A., open peridium with dark peridiolum in centre. B., peridium. C., open peridium with evaginated endoperidium, peridiolum discharged. D., T.S. open peridium, showing exoperidium, endoperidium and peridiolum. E., T.S. open peridium, showing evaginated endoperidium and peridiolum being discharged.

The following description of *S. stellatus* is taken from Cunningham (1942): "Peridium sessile, partly buried in mycelium subiculum, subglobose, to 2 mm. diameter, fleshy, externally hirsute and dingy white, internally smooth and orange. Peridiolum globose reddish-brown. 0.75-1.25 mm. diameter, lenticular when dry. Spores obovate or broadly elliptical, often pip-shaped or irregular, 6-10 x 5-7 μ , epispore hyaline, smooth, 1.25 μ thick."

At maturity, the peridium opens by several lines radiating from the apex, so that the open fruiting body has a star-like (stellate) appearance, orange in colour. The peridium separates into two cups, fitting one inside the other, viz. the exoperidium and the endoperidium (Fig. 1, D). The exposed peridiolum lies within the endoperidium (inner cup) submerged in a fluid. With

the discharge of the peridiolum the endoperidium remains evaginated, and may be seen as an opaque 'bubble' on the spent fruiting body (Fig. 1, C. and E.).

The spore discharge mechanism of *S. stellatus* has been ascribed by Ingold (1953) to the absorption of water by the palisade layer which forms the inner wall of the endoperidium, thus increasing its surface area. The outer wall of the endoperidium, which consists of interwoven hyphae, tends to impede this increase, so that strains are set up which are suddenly and violently released by the inner cup turning inside out. The peridiolum which was previously contained in the endoperidium is catapulted out with great force.

The maximum distances reached by the peridiola at Mr. Elson's home were conservatively estimated to be 10 feet horizontally and 9 feet vertically. Compare this with Cleland's (1934) estimate of 4 inches for the distance attained by specimens in South Australia. Nieol (1945), on the other hand, in more popular vein, reports on the 'great international fungus-gunnery competition' in which the two contestants Dr. A. H. R. Buller (Canada) and Miss L. B. Walker (U.S.A.) set records of 18 feet 7 inches for the horizontal distance and 14 feet 5 inches for the "all-time high" respectively.

S. stellatus has been recorded from a number of countries including India, New Zealand, Europe and North America. In Australia it has been recorded from South Australia and Victoria. This is the first authenticated record for Western Australia and it is interesting to note that since the initial report several people including the author have observed peridiola in various other localities (on walls, footpaths, etc., close to buffalo grass lawns), indicating that this fungus, rather than being rare, is fairly abundant in the metropolitan area of Perth, with buffalo grass litter appearing to be the most suitable habitat.

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FROM FIELD AND STUDY

Corvus feeding on Oranges.—On October 31, 1959, while inspecting an orange grove on the property of Mr. S. Byrd, of Harvey, my attention was directed to numbers of oranges on the ground with holes about $1\frac{1}{4}$ - $1\frac{1}{2}$ in. in diameter in the skin and the contents entirely lacking.

When the matter was referred to Mr. Byrd he stated definitely that this was the work of crows which fed upon the oranges. Mr. Byrd has handled locally killed birds but has not encountered any with the bases of the feathers white, so it seems reasonably